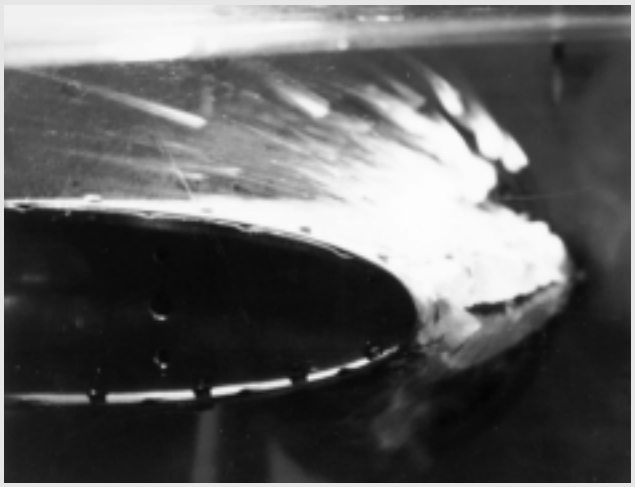
THE AMES Astrogram
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
AMES RESEARCH CENTER, MOFFETT FIELD
June 26, 1998
on-line@http://ccf.arc.nasa.gov/dx/

NASA lightweight 'ice zapper' to be used on new aircraft

An innovative NASA ice removal system will be included with the first new general aviation aircraft to be introduced in the United States in 15 years. The lightweight, patented device will zap dangerous ice from wings and other aircraft parts during flight.

Lancair Inc., Bend, OR, will test the ice removal system with its Lancair IV aircraft and make the system available later this summer with the new Columbia 300, a four-seat, general aviation airplane. Even in warm climates, aircraft icing can be a problem at higher altitudes where temperatures are cold.



High-speed photography demonstrates how the ice zapper shatters and ejects ice from a wing model in wind tunnel test.

In 1995, NASA licensed the ice zapper, officially known as the Electro-Expulsive Separation System, to Ice Management Systems, Inc., Temecula, CA, for development and marketing. Ice Management recently agreed to develop the system for Lancair aircraft. The ice zapper could help NASA meet its goal of greatly improving commercial aircraft safety.

"The ice zapper uses one-thousandth the power and is one-tenth the weight of electro-thermal ice removal systems used today," said inventor Leonard Haslim of Ames. "The system pulverizes ice into small particles and removes layers of ice as thin as frost or as thick as an inch of glaze."

Haslim, a naval jet fighter pilot during the Korean conflict, continues to be concerned with flying safety. He holds numerous patents, and he won NASA's inventor of the year award in 1988 for the Electro-Expulsive Separation System, which he also calls the "ice zapper."

"The Lancair IV aircraft, which cruises above 18,000 feet at 345 mph, is the perfect first candidate for this unique, new de-icing system, and this program complements our goal of enhancing safety and increasing the utility of our aircraft," said Lancair President Lance Neibauer.

"I think that once it is working on a small aircraft, engineers will realize the system will work well with larger airplanes too," Haslim said.

There are other methods to combat airframe icing, including thermal de-icing and pneumatic boots.

"Thermal de-icers that melt ice use a lot of energy," Haslim said. "Also, melted ice can re-freeze elsewhere on the aircraft, or larger loose ice shards can fly into the aircraft to cause damage."

Pneumatic boots inflate slowly and need as much as a quarter inch of ice to accumulate before they start to work. They also dislodge bigger ice pieces that can damage aircraft engines, according to Haslim.

"In one winter alone, 26 F/A-18 engines were damaged by ice chunks hitting engine fan blades," he said.

"The system uses a powerful electronic photoflash-like power supply combined with a thin copper ribbon that looks like a belt flattened on itself and embedded in a rubbery plastic," he said. "The looped, flattened copper ribbons are bonded to wings, engine inlets and other airplane parts where ice can form."

In less than a millisecond, the system sends bursts of high-current electricity through the two parallel layers of copper ribbon. The resultant magnetic fields suddenly repel each other. The upper ribbon jumps less than a twenty-thousandth of an inch, causing a high acceleration.

The motion breaks the ice bond, shatters the ice into table-salt-size particles and expels them from the airplane's surface. The system can run continually during flight, pulsing once or twice a minute, to keep airplane surfaces ice free. The system's overlapping copper ribbon prevents electrical interference.

The task of converting the Electro-Expulsive Separation System patent into a commercial product has taken nearly four years and almost $1,000,000, according to Richard Olson, President and Chief Operating Officer of Ice Management.

BY JOHN BLUCK

see related story on page 2

Ames ISO Web-site address: http://nasarc1.arc.nasa.gov/iso9000/index1.html

Wind Tunnel and Simulator Personnel Celebrate ISO Implementation

Wind tunnel and simulator personnel celebrated passing the ISO Certification audit on June 16 with a barbecue. The group picked a shady spot by Bldg. 200 to hang their banner of congratulations to the organizations involved and to enjoy munching on hot dogs and hamburgers.

Mike George, the acting Division Chief of FO, congratulated the Division and commented on how important ISO certification was in the competitive world of wind tunnels. Mike reminded everyone that the quality system must be maintained in order to be prepared for the surveillance audit in six months. Dave Jones, Assistant Division Chief for Simulation, spoke of the significance of ISO certification for the simulator facilities. Dave emphasized that ISO implementation was a team activity in which everyone contributed to attain the goal of certification. Bill Berry, the Center's management representative, added his congratulations to the group who, as he stated, "are the pathfinders for the Center."

BY SALLY BREW

Wind tunnel/simulator personnel enjoying the BBQ. ***photos by Ron Johnson***

From left to right: Paul Chaplin, Simulation System Department Manager, SYRE; Dave Jones, Assistant Division Chief for Simulation; Dan Petroff, Deputy Chief (Acting), Wind Tunnel Operations Division, and Anthony Radford, of Eurest.

Bill Berry congratulating the group during the BBQ.

1998 Length of Service Ceremony held June 15

The 1998 Length of Service Ceremony was held on June 15, in the main auditorium (N201). Employees with 25 years or more of Federal service for the period August 1, 1997 to June 30, 1998 were recognized.

Special recognition was paid to eight Ames employees who have reached their 40, 45, and 50 years of Federal service milestone. They are:

40 Years
Warren F. Ahtye
Eugene H. Bekstrom, Jr.
Michael J. Bond
John T. Howe
Fred H. Shigemoto
Fred C. Witteborn

45 Years
James A. Jeske

50 Years
Vernon J. Rossow

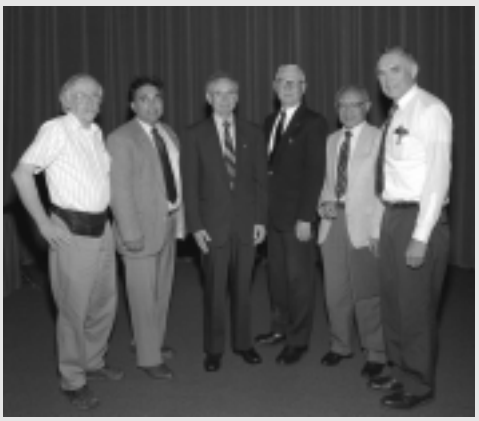
A complete list of honorees follows:

Code A - Aeronautics Directorate
25 Years of Service
Seth S. Kurasaki
David R. Picasso
30 Years of Service
Rodney O. Bailey
35 Years of Service
Victor R. Corsiglia
Charles S. Hynes
40 Years of Service
Michael J. Bondi
50 Years of Service
Vernon J. Rossow

Code C - Chief Financial Officer
25 Years of Service
Raquel P. Reynolds
Arelene C. Spencer
30 Years of Service
Ralph H. Robinson
Randy D. Rodrigues

Code D - Office of the Director
30 Years of Service
Marjorie S. Stathes
35 Years of Service
William E. Berry
Ralph Pelligra
40 Years of Service
Warren F. Ahtye
John T. Howe

Code F - Research and Development Services Directorate
25 Years of Service
John R. Allmen
Jon B. Bader
Dale R. Costa
James M. Joyce
Bonnie L. Samuelson



Dr. Henry McDonald is surrounded by 215 years of experience in the form of (from left to right): James Jeske (45 yrs); Michael Bondi (40 yrs); Dr. Henry McDonald; Fred Witteborn (40 yrs); Warren Ahtye (40 yrs); and Vernon Rossow (50 yrs).

photo by Roger Brimmer

Ronald H. Strong
John S. Torres
Tony L. Walker
Robert Wong
30 Years of Service
Donald N. Christianson
William C. Doty
Herbert J. Finger
Ronald L. Halverson
Roy W. Hampton
Andrew J. Hocker, Jr.
Danilo C. Ompoc
Steven A. Timmons
35 Years of Service
Pamela L. Empert
Richard D. Hanly
Gilbert H. Leibfritz
Robert W. Meneely

Code I - Information Systems Directorate
25 Years of Service
Robert W. Mah
John W. Parks
35 Years of Service
Terry L. Grant

Code J - Center Operations Directorate
25 Years of Service
Barry K. Cunningham
Jere L. DePascale
Clinton G. Herbert, Jr.
Dennis J. Korbel
Joan M. McCullough
Meredith Moore
Connie J. Newman
Julia T. Stephenson
John D. Wilson
30 Years of Service
Karen L. Adams
Carolyn S. La Follette
35 Years of Service
G. Warren Hall
John E. Humbert
Gilbert H. Leibfritz
Michael D. Makinen
Robert W. Meneely
Beatrice Morales
Lynne A. Roach

Code O - Flight Operations
25 Years of Service
Allan A. McCrary
35 Years of Service
Earl V. Petersen
40 Years of Service
Fred H. Shigemoto

Code S - Space Research Directorate
25 Years of Service
Linda M. Brown
Rene C. Castaneda
Joseph J. Hanzel
Gary A. Shelton
Sylvia A. Stanley
Christopher B. Wiltsee
30 Years of Service
Sherwood Chang
David Goorvitch
Emily M. Holton
35 Years of Service
Charles Chackerian, Jr.
John E. Greenleaf
Michael D. Shovlin
James R. Stallcop
40 Years of Service
Eugene H. Bekstrom, Jr.
Fred C. Witteborn

photo by Roger Brimmer

Warren Ahtye (40 year service award) and James Jeske (45 year service award) chat after the ceremony.

Briefs

NASA selects home for next generation space telescope

The duties of the Space Telescope Science Institute in Baltimore, MD, will be expanded to include the management of science operations for the Next Generation Space Telescope (NGST).

The Space Telescope Science Institute, located at the Johns Hopkins University, has been operating the science program for the Hubble Space Telescope since 1983.

"We looked through a microscope to decide who would operate the Next Generation Space Telescope," said NASA Administrator Daniel S. Goldin. "NASA and the scientific community had to determine who had the right facilities, who had the right experience, who was the best. The clear choice was Baltimore's Space Telescope Science Institute."

A goal of the Next Generation Space Telescope is to observe the first stars and galaxies in the Universe to further our understanding of how it formed following the Big Bang. NGST will have capabilities currently unavailable in existing ground-based or space telescopes.

NASA and French Administrator Allegre agree to expand space cooperation

NASA and the Centre National d'Etudes Spatiales (CNES) have agreed to explore joint cooperation on the exploration of Mars, telemedicine and education, with focus on the first Mars Sample Return mission, now scheduled for launch in the summer of 2005.

Mars exploration is envisioned as an international endeavor involving bilateral and multilateral cooperation, and France and the United States are interested in expanding cooperation in this area.

NASA and CNES already are cooperating in the 1996 Mars Global Surveyor mission, with CNES providing the Mars Relay communications package and contributing to the scientific payload.

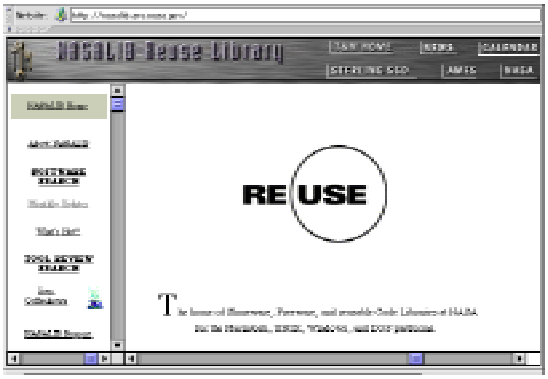
Seawinds instrument shipped for integration on QuickSCAT

A major milestone has been reached in NASA's development of "faster, better, cheaper" space missions with the delivery of the SeaWinds instrument, NASA's next generation El Nino monitoring device that measures wind speed and direction over the world's oceans, to Ball Aerospace in Boulder, CO, for integration into the Quick Scatterometer (QuikSCAT) satellite.

QuikSCAT is a mission designed to complete turnaround from conception to orbit in a very short period of time.

"One of the real challenges of this mission is having to do it in a year. The delivery of the instrument to Ball Aerospace signifies that we are on schedule and headed to our one-year goal," said Jim Graf, the QuikSCAT project manager at NASA's Jet Propulsion Laboratory (JPL), Pasadena, CA.

NASALIB: an agency-wide freeware, shareware and source code library



NASALIB is a web-based software library accessible to all personnel in the NASA domain. A search engine is available at the NASALIB home page, http://nasalib.arc.nasa.gov. Through the NASALIB database search engine, users can browse the archives, identify software that meets their needs, and download software from the origin links provided.

The library is primarily composed of source code and applications (freeware and shareware) which have been contributed by NASA software developers, or selected by the NASALIB staff from various Internet sources. All Mac and PC applications are virus tested. In addition to the NASALIB web-based search engine, the site has a "What's Hot" page highlighting the most popular downloads, such as PageSpinner, Perl, WinZip, Cute FTP, and GraphicConverter located at http://nasalib.arc.nasa.gov/whatshot.html. There is also a "Monthly Updates" page listing the library additions and software upgrades from the previous month at http://nasalib.arc.nasa.gov/monthlyupdate.html. Registered users are informed about monthly NASALIB news including the most recent software downloads available at the web site.

The NASALIB software library was originally created by Sterling Software for Ames as a tool to encourage and enable the reuse of source code and applications among Ames software developers. The source code library was merged with a Mac and PC shareware BBS in 1996, and its service was opened to all NASA centers in the United States. The library expanded its user base to include users of all platforms and developers using the major programming languages, such as C, C++, FORTRAN, UNIX shell, PERL and most recently Java.

A new feature at the NASALIB site is the ability to search a database of software product reviews. Reviews by NASA staff include those on software development tools, office suites, HTML editors and graphics programs. Links to third party reviews are also available. The database is constantly expanding, so if you have recently evaluated a commercial or noncommercial software product, please consider submitting your comments to the NASALIB Software Product Review library. The web site http://nasalib.arc.nasa.gov/review.html includes a search engine, browser and evaluation submittal form.

Visit the NASALIB home site http://nasalib.arc.nasa.gov to view the links to various NASALIB pages. First time visitors may want to start at the "Software Search" page, listed on the home page side bar. A search by keyword, platform, or a string search of the software abstracts will bring up a list of the software found to match your search criteria. Linking to an individual piece of software will bring up additional information, and allow you to click on the file location links to start downloading the software to your own computer. Software in NASALIB is generally compressed for downloading speed, so read the documentation on compression at the search engine page if you have any questions.

There is a NASALIB help desk at Ames which provides additional information about the library, the web site or any of the NASALIB services. Special requests for software are also supported. Contact the NASALIB staff at nasalib@ccf.arc.nasa.gov if you would like to request more information, or if you would like to contribute software, product reviews, or referrals to useful download sites. You may also contact the NASALIB administrator Sonia Kao at ext. 4-6312.

BY SONIA KAO

ARCLIB: Ames' software library

ARCLIB (http://arclib.arc.nasa.gov) is a web site maintained by the Software Management Project in Code JT. It is the first place to look when you need one of the commercial software packages licensed for use throughout Ames. Microsoft Office, Eudora Pro and Netscape Navigator are some of the titles available. Code JT provides management and distribution systems for software that is licensed for Center-wide use. The ARCLIB site acts as the "front end" for this effort, providing timely information, updates and a centralized distribution infrastructure. ARCLIB is linked to FTP servers for immediate high speed downloads. NT and AppleShare servers are also in place for network installations and redundancy. Contact Allen Carter at ext. 4-2632 for further information about ARCLIB.

Ames '98 Savings Bond Drive launches into high gear with the Neurolab crew!

The count-down for the '98 Savings Bond Drive has begun. Between June 24 and July 24, Ames employees will be able to sign-up to purchase United States Government savings bonds. Ames employees who attended the kick-off meeting for the bond drive on June 11 learned all about the value of U.S. savings bonds and then were treated to an entertaining and informative talk by the crew of the Neurolab Mission that flew earlier this year.

Buying savings bonds is a safe and simple way to save for the future - your purchase is made through an automatic payroll deduction. The Center's goal is to achieve 50% or more participation in the program. The Chair for this year's drive is Beverly Akins, Code SF. Beverly will be assisted by a number of coordinators and canvasers who can help answer any questions and help you enroll in this great program. The coordinators for the codes are:

Code D	Linda Haines/Sid Sun
Code A	Leslie Jacob
Code C	Barbara Shenier
Code F	Patricia Crooks
Code I	Arlene Pineo
Code J	Ed Cain
Code S	Larry Manning

photo by Roger Brimmer

Payload Specialist Jim Pawelczyk speaks with Dr. Henry McDonald and Mr. Bill Berry about the value of U.S. Savings Bonds, while Payload Commander Rick Linnehan looks on.

McNair students have a blast with the Neurolab Crew

photos by Roger Brimmer

The Neurolab crew (Pilot Scott Altman, Payload Specialist Jim Pawelczyk, Payload Commander Rick Linnehan, Mission Specialist Kaye Hire, Payload Specialist Jay Buckey, and Alternate Payload Specialist Alex Dunlap) pose with future astronauts Janet Aquilar, Miguel Hernandes, Diana Ruiz, and Jennifer Macias. Also on hand to present the awards are Ms. Sohelia Jahromi, the Space Camp Scholarship Chair for the Contractor Council, Ms. Valerie Bonnell, from Space Camp, and Ms. Lisa Marie Gonzales, Code DX.

Mission Specialist Kaye Hire congratulates Janet Aguilar.

Taking time out of their busy schedules, the crew of the STS-90, Neurolab Mission, were pleased to help present Space Camp Scholarships to four extremely bright and talented students from Ames' adopted school, Ronald McNair Elementary. The four Space Camp Scholarships were made available through the generous contributions of the Ames Contractor Council, and the Space Camp Company.

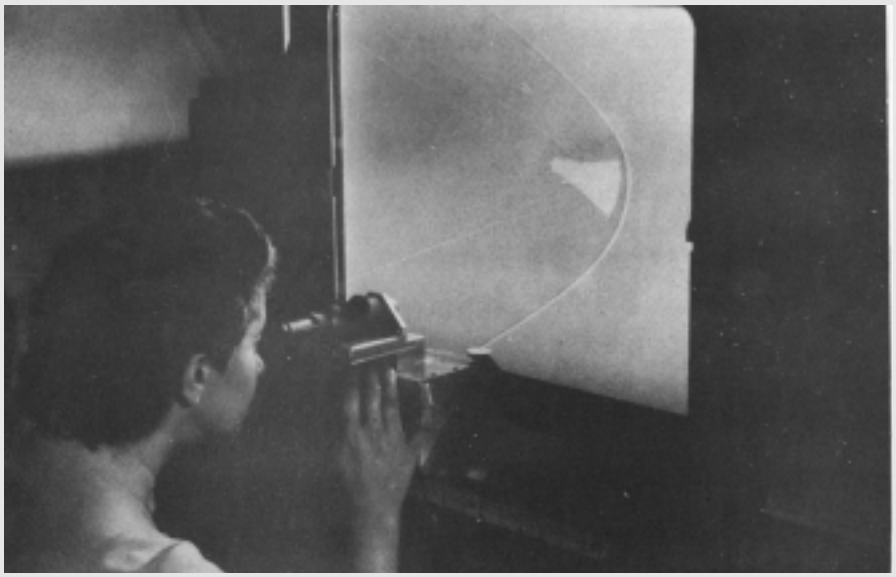
The winners of the 1998 scholarships went to four 5th graders – Janet Aguilar, Miguel Hernandez, Jennifer Macias and Diana Ruiz – who will be attending Space Camp in early August.

39 years ago at Ames: Wind tunnel tests on Project Mercury near completion

In June 1959, Ames kept its supersonic free-flight tunnel working around the clock. NASA had to finalize design of the Mercury space capsules that would carry America's first astronauts into space, then bring them safely home.

Ames had a great deal at stake in the re-entry. Harvey Allen had conceived of the blunt-body design in 1951, then worked with Al Eggers to refine its application. Ames employees devised the ablative materials on the heat shield, then used the Center complex of hypersonic and arc-jet tunnels to test every iteration of the capsule. Ames employees had every right to be proud on February 20, 1962, when John Glenn splashed down alive and well after his orbits of Earth.

BY HELEN RUTT



Here a technician is measuring the angle of the flight of a Project Mercury capsule model as seen by the shadowgraph method. She is working with the original full-sized negative of one of many data pictures made during each test of a Mercury capsule model launched by a high-speed gun through an instrumental range.

GAY Pride Month event scheduled

Roberta Achtenberg, a vice-president at the San Francisco Chamber of Commerce, will be speaking on Friday, June 26, at 11:30 a.m., in the N-258 auditorium. She will be speaking about her career and her experiences as an openly gay woman in the workplace. This event is being sponsored by GALA (Gays and Lesbians at Ames), in recognition of Gay Pride Month.

Throughout Roberta Achtenberg's career as a civil rights attorney, a law school dean, an elected San Francisco Supervisor, an Assistant Secretary at HUD, a candidate for mayor of San Francisco and now as a representative for the Public Policy Department of the San Francisco Chamber of Commerce, Roberta Achtenberg has helped those in need through public service.

Gay Pride Month has been celebrated since 1970 and events occur around the world. Like celebrations for other cultural groups, this is an opportunity to recognize people's backgrounds, history, and contribution to society.

All Ames employees are invited to attend. Refreshments will be served. For more information, please contact Joel Antipuesto at ext. 4-6559 or email him at: jantipuesto@mail.arc.nasa.gov or Rosalind Jones at ext. 4-1479 or email her at: rjones@mail.arc.nasa.gov.

Seminar scheduled

The seminar entitled: "Space Flight: Problems with the Commercialization of Space Immunology" is scheduled to be held on Wednesday, July 8, at 11:00 a.m., in Bldg. 239, Rm. B39.

Stephen Keith Chapes, Ph.D., M.P.H, Associate Professor of Biology at Kansas State University, will discuss the immunology group at Kansas State University participation in three space flight experiments involving animals and several more involving immune cells in in-vitro experiments.

This talk will focus on results obtained from these flights and the difficulty in elucidating a definitive paradigm on the effects of space flight on the immune system.

Everyone is welcome to attend.

Opportunity to transfer from CSRS (or CSRS Offset) to FERS

By June 15, all Ames employees eligible (covered under CSRS or CSRS Offset) to transfer to FERS during the upcoming open season will receive a benefits bulletin outlining the details to transfer to FERS. Along with the bulletin, you will receive an election form, SF-3109, and a copy of the FERS Transfer Handbook.

If you believe that you are eligible to join FERS and do not receive this information by June 15, please contact the benefits specialists listed below:

Codes C, J, N and S - Contact Lita Que at ext. 4-1019 or email at: lque@mail.arc.nasa.gov

Codes A, D, I and F - Contact Kathy Shearman at ext. 4-1020 or mail at: kshearman@mail.arc.nasa.gov

Ames Year 2000 Re-assessment

Center revisits year 2000 computer bug problem

Though Ames did a self assessment of the Year 2000 computer bug problem at the Center in August 1997, the Ames Year 2000 Project Office found that the study was not complete, and a new Ames survey recently was launched.

Also known as the Year 2000 problem, the computer bug results from computers programmed with years represented by only two digits. Some experts predict that when the year 2000 arrives, widespread computer confusion may occur across the world because many of the machines will "think" the year is really 1900. This problem, which at first seems simple, can cause serious computer mix-ups.

The Year 2000 computer bug is bad enough that President Clinton created a strong council to fix the problem. The Year 2000 Conversion Council is tasked with making sure that government services are not disrupted by the bug. NASA Headquarters expects Ames to solve all of the Center's Year 2000 bug problems by February 1999.

The NASA Inspector General (IG) is reviewing all NASA-wide efforts to identify and solve Year 2000 problems. The IG review is already underway at Ames.

Headquarters is especially concerned that NASA centers have not looked closely for the problem in computer chips and programs embedded in a wide variety of systems and machines from facility instrumentation to spacecraft.

Recently discovered Year 2000 problems with major computer systems at Ames also contributed to the decision to conduct the reassessment. In addition, other computers thought to be problem-free were not thoroughly checked in the first assessment, and some Center programs and services were not surveyed.

The bug is in Ames supercomputer operating systems; control systems for the 12-Foot and Unitary Wind Tunnels; flight simulation software for the Crew-Vehicle Systems Research Facility; the Center's accounting system; network encryption devices; card key building access systems and the centralized system that monitors and controls building environments across the Center.

Another set of computers being checked at Ames are Intel-based and Intel-compatible personal computers that have a problem in their Basic Input/Output Systems (BIOS) that help maintain the correct date and time for PCs. Computer systems administrators have begun to test all PCs at Ames for the two-digit date problem.

Most PCs can be fixed by resetting the date after the year 2000; other PCs will need BIOS upgrades; and some machines must be replaced. Some UNIX computer systems also have Year 2000 problems. Macintosh hardware and operating systems do not have the Year 2000 bug.

In addition to doing PC BIOS tests, systems administrators are installing LANDESK, an automated asset management system. It will be used to help assess the Year 2000 compliance status of the Center's many PC software packages.

Overall, the Year 2000 Project Office concluded that a focused analysis of Ames computer systems for the bug would be most effective.

"We are targeting the things that really matter to Ames and the agency," said Ray O'Brien, Year 2000 project manager at Ames.

He said the re-assessment will focus on essential Center services, key facilities and high-visibility research and engineering projects with short-term deliverables or milestones. The survey will also zero in on areas that pose a significant risk to:

- Human life or property.
- Products or services that are important to internal or external customers (risk to schedule, quality or cost).
- Commitments made to other agency or commercial partners.

Directorate and line management will be able to use re-assessment results and Ames Year 2000 Office recommendations to decide what systems need to be fixed, retired or left as they are.

Meanwhile, the project office is planning a series of workshops at Ames for employees who will participate in the re-assessment. The survey part of the re-assessment will be completed in July.

"During a general campaign to prepare Ames for the Year 2000 rollover, we will address all other computer systems that were not included in the focused reassessment," O'Brien said. "We are expecting everyone at Ames to help by checking their computers and other systems for compliance."

Anyone with questions or comments about the Year 2000 bug and its potential effects on Ames should contact Ray O'Brien, at ext. 4-6875 or Cyndi Martinez at ext. 4-0905 at the Ames Year 200 Project Office.

The office also recommends these websites for additional information:

- SGI — http://www.sgi.com/tech/year2000/
- Sun — http://www.sun.com/980218/y2000/
- DEC — http://ww1.digital.com/year2000/
- Apple — http://www.apple.com/macos/info/2000.html#macos
- Microsoft — http://www.microsoft.com/year2000/
- Y2K and UNIX — http://uwsg.ucs.indiana.edu/y2k/index.html
- Federal COTS Database — http://y2k.policyworks.gov/srch/y2kretr2.cfm?product=1705
- GE — http://www.geis.com/html/y2k_faq.html

The Ames Year 2000 Project Office is part of the Applied Information Technology Division (JT).

BY JOHN BLUCK

Summer lecture series to be held at Stanford University

Stanford's Department of Aeronautics and Astronautics will host a series of free public lectures this summer on the topic "New Science and Technology in the Aerospace Age."

The lecture series is sponsored by the National Aeronautics and Space Administration and the American Society for Engineering Education and is dedicated to the memory of Daniel Bershader, the Professor of Aeronautics and Astronautics who was instrumental in the development of the lecture series before his death in 1995.

The lectures are held Thursdays at 8 p.m., in the Terman Auditorium:

July 2: G. Scott Hubbard, Associate Director for Space, Ames: "The Lunar Prospector Mission: Concept and Early Results."

July 9: Edwin Erickson, research scientist, Astrophysics branch, Ames: "The Decade(s) of Infra-Red Astronomy."

July 16: Dallas Denery, Deputy Chief of Air Traffic Management, Ames: "The Future of Air Traffic Management."

July 23: Christopher McKay, research scientist, Planetary Systems branch, Ames: "The Search for Life on Mars and Beyond."

July 30: Frank Drake, President, Search for Extraterrestrial Intelligence Institute: "The Search for Extraterrestrial Intelligence."

Aug. 6: Michael Carr, Chief, Astrobiology branch, U.S. Geological Survey: "Early Results from Mars Global Surveyor."

For more information, please contact Melinda Francis at (650) 723-3328.

Internet site unveiled for fire monitoring by satellite

In an effort to provide up-to-date information about current fire situations around the globe to the public and scientific communities, NASA has unveiled a new presence on the World Wide Web that provides an up-to-date synopsis of current information about fires and their effect on global climate change. This web site features revealing animation depicting wildfires across the globe. The new Web site is located at URL:

http://modarch.gsfc.nasa.gov/fire_atlas/fires.html

This site provides recent imagery, analysis of data from the early and mid-1990s, and a synthesis of a range of satellite information resources that are currently available about terrestrial fires and future global fire monitoring capabilities. The Web site draws upon satellite resources from several U.S. agencies and international partners and is intended to serve the needs of the scientific community and the general public.

Ames Multicultural Street Fair set for July 15!

Mark your calendar, plan to attend, bring a friend and enjoy Street Fair '98.

Where: Bush Circle in front of Bldg. 200, Time: 11:00 a.m to 1:30 p.m. What's happening: Singing, dancing, music on three stages, arts and crafts, featuring food from different parts of the world. This only comes around every six years, so don't miss it. Bring a blanket to sit under the trees in the warm California sun, and plan to say good-bye to El Nino.

Volunteers are still needed for set-up and clean-up. If you are interested in volunteering, please contact one of the following at these e-mail addresses: Mary Buford Howard at: mbhoward@mail.arc.nasa.gov; Mary Salcido at: msalcido@mail.arc.nasa.gov; or Joe Shields at: jshields@mail.arc.nasa.gov.

Calendar

Jetstream Toastmasters, Mondays, 12 noon to 1 p.m., N-269/Rm. 179. Guests welcome. POC: Jenny Kahn at ext. 4-6987 or Pam Walatka at ext. 4-4461.

Ames Child Care Center Board of Directors Meeting, Tuesdays, 12 noon to 1 p.m., N-213/Rm. 220. POC: Lisa Reid at ext. 4-2260.

Ames Contractor Council Meeting, July 1, 11 a.m., N-200/Comm. Rm. POC: Greg Marshall at ext. 4-4673.

Hispanic Advisory Committee for Employees, July 2, 11:45 a.m. to 12:30 p.m., N-239/Rm. 177. POC: Carlos Torrez at ext. 4-5797.

Environmental, Health & Safety Monthly Information Forum, July 2, 8:30 a.m. to 9:30 a.m., Bldg. 19/Rm. 1078. POC: Linda Vrabel at ext. 4-0924.

Ames African American Advisory Group Meeting, July 2, 11:30 a.m. to 12:30 p.m., N-241/Rm. 237. POC: Antoinette Price at ext. 4-4270 and Mary Buford Howard at ext. 4-5095.

Professional Administrative Council (PAC) Meeting, July 9, 10:30 a.m. to 11:30 a.m., N-244/Rm. 103. POC: Janette Rocha, ext. 4-3371.

Ames Sailing Club Meeting, July 9, 11:30 a.m. to 1 p.m., N-262/Rm. 100. POC: Greg Sherwood at ext. 4-0429.

Ames Multicultural Leadership Council Meeting, July 15, 11:30 a.m. to 1 p.m., Galileo Rm./Ames Café. POC: David Morse at ext. 4-4724 or Sheila Johnson at ext. 4-5054.

NFFE local 997 Union General Meeting, July 15, 11:30 a.m. to 12:30 p.m., Bldg. 19/Rm. 1040. POC: Marianne Mosher at ext. 4-4055.

Ames Amateur Radio Club, July 16, 12 noon, N-260/conf. rm. POC: Walt Miller, AJ6T at ext. 4-4558.

Ames Asian American Pacific Islander Advisory Group Meeting, July 16, 11:30 a.m. to 1 p.m., N-213/Rm. 261. POC: Daryl Wong at ext. 4-6889 or Brett Vu at ext. 4-0911.

Native American Advisory Committee Meeting, July 28, 12 noon to 1 p.m., Ames Café. POC: Mike Liu at ext. 4-1132.

Nat'l Association of Retired Federal Employees, S.J. Chapter #50, Meeting. Aug 7, at the Elk's Club, 44 W. Alma Avenue, San Jose. Social hour: 10:30 a.m. Program & business mtg. follow lunch at 11:30 a.m. POCs: Mrs. Leona Peery, President, (650) 967-9418 or Earl Keener, Public Relations, (408) 241-4459.

Ames Classifieds

Ads for the next issue should be sent to *astrogram@mail.arc.nasa.gov* by the Monday following publication of the present issue.

Ads must involve personal needs or items; no commercial/third-party ads. Ads will run on space-available basis only. First-time ads are given priority. Ads must include home phone numbers. Ames extensions will be accepted for carpool and lost and found ads only. Ads must be resubmitted for each issue.

Housing

For rent: Master bedroom in Sunnyvale home, one block from El Camino, 5 blocks from H85. $550/mo + applied utils., and first and last month's rent. Private bath, full use of kitchen and pots and pans. Big garden. Touran (408) 773-1927.

Transportation

'67 VW Bug, Rblt. 70' engine, new clutch/battery/exhaust, very clean, smog exempt. Moving, must sell. $3,500. Shawn (707) 695-8433. Vehicle is at Ames.

'68 Ford Mustang-302 PS, AT, 300HP, centerlines, Holley 750, headers, flowmasters, new: ENG. <1000MI, ALT, RAD, paint, priced to sell, runs great, $6,000. Dave (650) 961-4882 or (650) 948-7456.

'79 Chevrolet Malibu, 67K miles, auto transmission, 4-dr.,vehicle is in very gd running cond. $1300 or B/O. (408) 730-5282.

'87 Mazda 626, excel. cond., 104K mi., orig. owner, 2 dr, 5 sp, A/C, AM/FM/cass., white w/ blue int, $2,400. Carol (408) 253-7417.

'87 Toyota tercel, orig. owner, very gd. cond. $2,500 or B/O. Call (650) 493-3916.

'88 Cadillac Eldorado Briarritz, Gold series, fully loaded,125K mis, asking $5,300 or B/O. Bob (408) 736-4039.

'92 Nissan King Cab 4x4, 4cyl, 66K mis, CD, A/C, tinted windows, bedliner, 30" All Terrain tires, alarm, chrome pkg., 8yr/100k extended warranty, one owner, well maintained. Reuben (650) 961-1616.

'95 Ford Aerostar 7 passenger van. Immaculate, all amenities, new tires, brakes, shocks, 58K mis, $13,500 firm. (KBB is $14,800). Bill (408) 464-8073 after 6:00 p.m. or on weekends.

'97 Ford Explorer, 4dr, 4X4, XL, grn, A/C, auto, roof rack, CD, 19K mis. $20,950. Call (408) 279-6781.

Miscellaneous

Cement mixer, electric-powered, $150 or B/O. Long, stable, beginner's windsurfer, $50 or B/O. Both items in Sunnyvale. Call (408) 737-0988.

HP LaserJet 4L Printer: 300 dpi, 4 ppm; exc. cond., $135. Plustek PageReader Scanner: single-sheet feeder, 256 grayscale w/OCR and other software, $35. Both for $150. John (650) 326-1344 or email at: jmd001@aol.com

Home sale: Blue striped demin sofa, loveseat and matching chair, bookcase, stereo cabinet, drawing table, rattan chair and coffee table, torch lamp, cookware, dishes, glasses, coffee machine, globe. Tina (650) 961-1616.

Fender Twin Reverb guitar amplifier--100 watts, 2x12" spkrs, all-tube. From "warm vintage" to "screaming modern" tone. New tubes, mint cond. Lists for $1299-Sell for $700! Also, ADA MP-1 MIDI programmable tube guitar pre-amp--The "warmth" and "feel" of tubes-the programmability of MIDI! Very versatile-128 programmable slots from "vintage clean" to "over-the-top Marshall Roar." Mint cond! Sell for $375! Have all orig. papers/accessories for both. Matt (408) 246-0607.

Pair of 49er tickets, sec. 53; 8/23 Miami pre-season, $35 ea. Call (510) 656-7654.

Two blue canvas, 6ft, teak outdoor umbrellas. $40/pr. Call (408) 295-2160.

Pet needs a loving home: Pure bred American Cocker Spaniel--adult male, "blue-roan" coat, wonderful personality, very loving. New owner must be caring and responsible. For info call Ron or Cheryl at (408) 265-7433.

Must sell, kingsize mattress, box spring and frame $70 or B/O. Two-drawer beige file cabinet $25; 4 drawer black file cabinet $50; 6 ft. brown office storage cabinet $40; five-drawer lateral file cabinet $350; Antique 16mm film projector $75. Gary (650) 254-0614.

Childcraft crib/usedbed, with matching four drawers dresser/changing table, honey oak, exc. cond., must sell by 6/26. Asking $450 or B/O. Ramona (408) 263-4222.

Thomasville cherrywd student desk/chair & dresser. Perfect cond. $575. Call (408) 248-1516.

1920's in-wall, full-height hutch w/three upper cabinets, spice drawers, cutting board and lower drawers. Victim of remodel. $100. (408) 295-2160.

SubZero Frig, double bed, bar stools, patio & work tables & chairs, Gaggenau Cooktop & Oven, 12' ladder, TV stands, futons. B/O. Call (650) 948-4831.

Computer System Performa upgraded to LCIII. (32mg) monitor Included & modem includes software, stand alone system, $500. Sonya (408) 842-0259.

14k gold diamond ring, certificate of appraisal $3,195, asking $2,000 or B/O; 18k gold earings, $60; 14k gold earings, $100; 14k gold band w/diamond cross, $200; two 14k gold bracelets, $50. ea. Becky (408) 226-5932.

Vacation rental

For sale or trade: Thousand Trails/NACO campground membership. Dues up to date. Make me an offer I can't refuse. Hank (408) 923-2231.

Lake Tahoe-Squaw Valley-Townhse, 3bd/2ba, balcony view, horseback riding, hiking, biking, golf, river rafting, tennis, ice skating, and more. Summer rates. Call (650) 968-4155 or email at: DBMcKellar@aol.com

Carpool

Looking for someone to carpool with from UC Berkeley to Ames. If interested, please email at: jwang2@mail.arc.nasa.gov

Looking for someone to carpool from Fremont to Ames. Hours are 7:00 a.m. to 4:30 p.m., Monday to Friday. Lawrence, ext. 4-6109.

Lost and Found

Found: Red, round bag in parking lot of Bldg. 240. Contains jewelry. Carol, ext. 4-6201.

Reward for return of woman's diamond wedding ring, lost in vicinity of Bldg. 19 on 6/15. Yellow gold mounting shaped somewhat horseshoe w/marquise diamond in center. Jan, ext. 4-0904.

Astrogram deadlines

All Ames employees are invited to submit articles relating to Ames projects and activities for publication in the *Astrogram*. When you submit stories or ads for publication, make sure to check the publication deadline and submit your material by e-mail to astrogram@mail.arc.nasa.gov on or before the deadline. Stories should be sent as enclosures in MS Word.

If you have questions about items for publication, contact the editor at the above email address.

Deadline	*Publication*
Mon., Jun 29	*Fri., Jul 10*
Mon, Jul 13	*Fri, Jul 24*
Mon, Jul 27	*Fri, Aug 7*
Mon, Aug 10	*Fri, Aug 21*

New Center picture badges to be taken

The Protective Services Office would like to inform Center employees of the new design in the Ames picture badges, which are required to more accurately reflect the NASA universal badge design, for employees, contractors, and those Resident Agency (RA) personnel requiring a Moffett Field RA picture badge.

The Employee Badge Office (EBO) is currently developing the schedule for Ames employees to come to Bldg 15, Employee Badging Office, and have an updated video photo image taken. Scheduling and photos will be conducted by individual directorates and divisions. This may take several months to complete.

For those facilities that employ electronic card access control systems, the new picture badge will also serve as the card access medium.

New picture badges will subsequently be issued in bulk upon completion of each directorate and division. New contractor picture badges will be issued as each individual contract is renewed.

To view the new badge designs, double click on the Protective Services home page address below.

http://ccf.arc.nasa.gov/codejp/JP_home.html#FAQIndex

Disaster communications volunteer opportunity available

DARTCOM, the communications component of the Center's Disaster Assistance and Rescue Team (DART), has opportunities for several highly motivated, dedicated, and reliable candidates who are willing to train and become proficient as Communications Specialists in supporting the voluntary emergency communications needs of the Center and, when approved by the Center Director, to deploy off-site to assist other city, state, and federal activities.

Primary requirements for this opportunity, beyond commitment, interest and aptitude, are that the candidates must be willing to initially train up to a maximum of four hours per week until fully proficient and then continue training up to a maximum of two hours per week to maintain proficiency and currency with the equipment and protocols. Additionally, the candidates must be willing to be available on-call to provide support when activated and be able to rapidly deploy off-site along with other components of DART that may have to leave the Center to assist other city, state, and federal activities.

While some background or experience with communications systems, radio, and communications protocols would be highly desirable, it is not a prerequisite to participation and success in the position.

DARTCOM was established in 1991 with a mission to install and operate emergency communications systems in support of the DART mission at Ames, and with Center Director approval, beyond the Center, encompassing an exciting and comprehensive array of communication technologies, protocols and resources including radio, computer, telephone, satellite and television utilized in support of the DART and Center missions.

The choice to participate in DARTCOM can be a personally rewarding growth opportunity to serve the Center and the community as well as to learn, expand and exercise new or existing communications interests, experiences, and skills that might also be of use and value in other personal and professional activities.

The application cutoff date is July 24. Please contact one of the following individuals for further information or to apply for this exciting communications opportunity: Mark Allard at email: mallard@mail.arc.nasa.gov or call him at ext. 4-6145; Bill Notley at email: bnotley@mail.arc.nasa.gov or call him at ext. 4-1415, and John Peterson at email: jepeterson@mail.arc.nasa.gov or call him at ext. 4-0988.

BY MARK ALLARD

THE AMES Astrogram

The Ames ASTROGRAM is an official publication of the Ames Research Center, National Aeronautics and Space Administration.

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THE AMES Astrogram

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